

CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims:

1-22. (Canceled)

23. (Currently Amended) A control system comprising:

a host processor;

a first controller communicatively coupled to the host processor, the first controller being associated with a first network identifier, the first controller including a first module connected to a second module via a first backplane;

a second controller communicatively coupled to the host processor, the second controller being associated with a second network identifier, the second controller including a third module connected to a fourth module via a second backplane; and

a fiber optic cable connecting the first module of the first controller and the third module of the second controller;

wherein the first controller is programmed to transfer the first network identifier to the second controller via the fiber optic cable and not via either one of the first backplane and the second backplane, the transfer being in response to detecting an error associated with the first controller.

24. (Currently Amended) A control system as defined in claim 23, wherein the first module of the first controller comprises:

a processor;

a co-processor;

an operating system executed by the processor; and,

a co-operating system executed by the co-processor wherein the operating system and the co-operating system cooperate to transfer data between the first module of the first controller and the third module of the second controller.

25. (Previously Presented) A control system as defined in claim 23, wherein the first controller comprises a network module and the first network identifier is determined by an operating state of the first controller.

26. (Previously Presented) A control system as defined in claim 23, wherein the first controller comprises a remote IO head operably connected to a remote IO drop.

27. (Previously Presented) A control system as defined in claim 23, wherein the first network identifier comprises an Internet Protocol address.

28. (Canceled)

29. (Canceled)

30. (Canceled)

31. (Canceled)

32. (Canceled)

33. (Canceled)

34. (Previously Presented) A control system comprising:

- a host processor;

- a first controller communicatively coupled to the host processor, the first controller being associated with a first network identifier, the first controller being connected to a first backplane;

- a second controller communicatively coupled to the host processor, the second controller being associated with a second network identifier, the second controller being connected a second backplane; and

- a fiber optic cable connecting the first controller and the second controller;

- wherein the first controller is programmed to transfer the first network identifier to the second controller via the fiber optic cable and not via either one of the first backplane and the second backplane, the transfer being in response to detecting an error associated with the first controller.

35. (Previously Presented) A control system as defined in claim 34, wherein the first controller comprises:

- a processor;

- a co-processor;

- an operating system executed by the processor; and,

a co-operating system executed by the co-processor wherein the operating system and the co-operating system cooperate to transfer data between the first controller and the second controller.

36. (Previously Presented) A control system as defined in claim 34, wherein the first controller comprises a network module and the first network identifier is determined by an operating state of the first controller.

37. (Previously Presented) A control system as defined in claim 34, wherein the first controller comprises a remote IO head operably connected to a remote IO drop.

38. (Previously Presented) A control system as defined in claim 34, wherein the first network identifier comprises an Internet Protocol address.

39. (New) An active standby control system comprising:

- a host processor unit;

- a first controller communicatively coupled to the host processor unit, the first controller including a first module having a processor and a transfer port, and second module connected to the first module by a backplane, the first controller further communicatively coupled to a plurality of remote IO drops;

- a second controller communicatively coupled to the host processor unit, the second controller including a first module having a processor and a transfer port, and second module connected to the first module by a backplane, the second controller further communicatively coupled to the plurality of remote IO drops;

- a cable connected to the transfer port of the first module of the first controller and connected to the transfer port of the first module of the second controller for transferring data between the first module of the first controller and the first module of the second controller.

40. (New) The active standby control system of claim 39 further comprising a co-processor in the first module of the first controller for executing data transfers over the cable.

41. (New) The active standby control system of claim 40 wherein the co-processor is embedded in the processor.

42. (New) The active standby control system of claim 39 wherein the cable is a fiber optic cable.

43. (New) The active standby control system of claim 42 wherein the cable utilizes Ethernet.